

AMENDMENTS TO THE CLAIMS

Claims 1-23 (Cancelled)

24. (New) A method of treatment for the promotion of cartilage and/or bone formation comprising the step of administering an effective amount of CXCL6 to individual in need thereof.
25. (New) The method according to claim 24, which is a method for the prevention or treatment of a cartilage or osteochondral defect.
26. (New) The method according to claim 24, which is a method for the prevention or treatment of a joint surface defect not related to inflammation.
27. (New) The method according to claim 24, wherein the source of CXCL6 is a population of CXCL6-expressing cells.
28. (New) The method according to claim 25, wherein said CXCL6 is administered to said osteochondral defect in a gradient.
29. (New) The method according to claim 24, further comprising the step of administering chondrogenic cells or precursor cells of said chondrogenic cells.
30. (New) A method of treatment for the promotion of cartilage and/or bone formation comprising the step of administering an effective amount of CXCL6-expressing cells to an individual in need thereof, wherein said cells comprise a foreign DNA encoding said CXCL6 under the control of a promoter.

31. (New) The method according to claim 30, which is a method for the prevention or treatment of a cartilage or osteochondral defect.
32. (New) The method according to claim 30, which is a method for the prevention or treatment of a joint surface defect not related to inflammation.
33. (New) The method according to claim 30, wherein said CXCL6-expressing cells are chondrogenic cells.
34. (New) The method according to claim 30, wherein said CXCL6-expressing cells are embedded in a matrix.
35. (New) A method for determining chondrocyte phenotypic stability of a cell population, said method comprising the steps of a) providing a chondrocyte cell population and b) determining the expression of CXCL6 by said cell population, wherein expression of CXCL6 is indicative of said chondrocyte phenotypic stability.
36. (New) A method of inducing or restoring chondrocyte phenotypic stability in a progenitor cell population in vitro, said method comprising the step of administering CXCL6 to said progenitor cell population.
37. (New) A method of inducing or restoring differentiation of a precursor cell population into chondrocytes, said method comprising the step of administering CXCL6 to said precursor cell population.

38. (New) A method for producing a medicament for the promotion of formation of cartilage or bone in vivo, which method comprises
- a) obtaining cells from a cartilage biopsy;
 - b) selecting cells therefrom based on CXCL6 expression; and
 - c) formulating said CXCL-6 expressing cells in a medicament.